Washington, D.C. 20590



Research and Special Programs Administration

DOT-E 11644 (FOURTH REVISION)

EXPIRATION DATE: April 30, 2002

(FOR RENEWAL, SEE 49 CFR § 107.109.)

1. <u>GRANTEE:</u> United States Can Company Elgin, IL.

2. PURPOSE AND LIMITATION:

- a. This exemption authorizes the manufacture, mark and sale of a non-refillable non-DOT specification inside metal container conforming in part with the DOT Specification 2Q, to transport certain refrigerant gases. This exemption provides no relief from any regulation other than as specifically stated.
- b. EXEMPTION SCOPE LIMITATIONS An exemption authorization to manufacture, mark, sell, and transport only represents certification of safety for a package when it is an article of commerce in transportation. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce. The safety analyses did not consider the hazards and risks associated with consumer use, use as a component of a transport vehicle or other device, or other uses not associated with transportation in commerce.
- 3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
- 4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.304(e) and § 173.306(a)(3) in that the prescribed packaging is not listed as an authorized packaging.
- 5. <u>BASIS:</u> This exemption is based on United States Can Company's application dated April 12, 2000 submitted in accordance with § 107.109.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous materials description/proper shipping name	Hazard Class/ Division	Identification number	Packing Group
1,1,1,2 Tetrafluoroethane <i>or</i> Refrigerant gas R 134a	2.2	UN3159	n/a
Consumer commodity, as appropriate	ORM-D	None	n/a
refrigerant gases, n.o.s.	2.2	UN1078	n/a

7. PACKAGING AND SAFETY CONTROL MEASURES:

a. <u>PACKAGING</u> - Packaging prescribed is a non-refillable non-DOT specification inside metal container conforming with United States Can Company drawing number 211VCTR, or drawings 211VCND and 2075PRM on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA), and DOT Specification 2Q (§ 178.33a) except as follows:

§ 178.33a-2 Type and size.

- (a) * * *
- (b) The maximum capacity of the containers manufactured under this exemption may not exceed 32.5 cubic inches (18.0 fluid ounces). The maximum diameter must not be more than 2.7 inches.

§ 178.33a-6 Manufacture.

- (a) * * *
- (b) * * *
- (c) Ends: The dome must be equipped with a pressure relief device (PRD) as depicted in the drawing on file with the OHMEA. The bottom must be designed to buckle at pressures greater than the pressure at which the dome buckles and vents.

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- § 178.33a-7 Wall thickness.
- (a) The minimum wall thickness for containers manufactured under this exemption is 0.009 inches.
- § 178.33a-8 Tests.
- (a) Each 2500 containers or less, successively produced as a batch or part thereof must constitute a lot. Two containers, one with a PRD and one without a PRD, taken randomly from each lot and complete with the ends assembled must be pressure tested to destruction. For containers fitted with a PRD, the dome must not buckle below 220 psig. Upon buckling, the dome must vent, and the bottom must not buckle. The burst pressure of containers without a PRD may not be less than 320 psig.
- (b) If either of the test containers fails to meet the above requirements, the lot must be rejected. However, an additional 5 randomly selected pairs of containers from that lot may be pressure tested to qualify that lot. If any of the additional test containers fail the pressure test, that lot must be rejected.
- § 178.33a-9 Marking.
- (a) * * *
 - (1) Containers must be marked "DOT-E 11644" in lieu of "DOT 2Q".
 - (2) * * *
- b. <u>TESTING</u> Prior to shipment, each completed container must be heated until the pressure in the container is equivalent to the equilibrium pressure of the lading at 130° F. Lading equilibrium pressure may not exceed 198 psig at 130° F. Acceptable containers must show no evidence of leakage, distortion or other defect.
- c. OPERATIONAL CONTROLS Each packaging must be prepared and shipped in accordance with the following:
 - (1) The liquid content of the lading may not completely fill the container at 130° F.

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(2) The container must be packed in a strong outside packaging as prescribed in § 173.301(k).

8. <u>SPECIAL PROVISIONS:</u>

- a. Containers filled with a material meeting the definition of a "consumer commodity" in § 171.8 may be renamed "consumer commodity", reclassed as ORM-D material and shipped in accordance with § 173.306(h). These outside packagings are not required to be marked "INSIDE CONTAINERS COMPLY WITH DOT-E 11644".
- b. In accordance with the provisions of Paragraph (b) of \$ 173.22a, persons may use the packaging authorized by this exemption for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this exemption.
- c. A person who is not a holder of this exemption, but receives a package covered by this exemption, may reoffer it for transportation provided no modifications or changes are made to the package and it is offered for transportation in conformance with this exemption and the HMR.
- d. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.
- e. Each packaging manufactured under the authority of this exemption must be either (1) marked with the <u>name of the manufacturer and location (city and state) of the facility at which it is manufactured</u> or (2) marked with a <u>registration symbol</u> designated by the Office of Hazardous Materials Exemptions and Approvals <u>for a specific manufacturing facility</u>.
- f. A current copy of this exemption must be maintained at each facility where the package is manufactured under this exemption. It must be made available to a DOT representative upon request.
- g. <u>MARKING</u> Each outside packaging must be marked "INSIDE CONTAINERS COMPLY WITH DOT-E 11644".
- 9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, and cargo only aircraft.

- 10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each aircraft and cargo vessel used to transport packages covered by this exemption. The shipper must furnish a current copy of this exemption to the air carrier before or at the time the shipment is tendered.
- 11. <u>COMPLIANCE:</u> Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 <u>et seq:</u>
 - o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
 - o Registration required by § 107.601 <u>et seq.</u>, when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by § 172.700 through § 172.704.

No person may use or apply this exemption, including display of its number, when the exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (Sections 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must inform the AAHMS, in writing, of any incidents involving the package and shipments made under the terms of this exemption.

Issued at Washington, D.C.:

Robert A / McGuire

Acting Associate Administrator for Hazardous Materials Safety

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(DATE)

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Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590. Attention: DHM-31.

The original of this exemption is on file at the above office. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

Copies of exemptions may be obtained from the AAHMS, U.S. Department of Transportation, 400 7th Street, NW, Washington, DC 20590-0001, Attention: Records Center, 202-366-5046.

PO: sIn